

PCV31

DRUG PRICE AND UTILIZATION OF BETA BLOCKERS IN US MEDICAID PROGRAMS

Jing Y, Chen Y, Wigle PR, Guo JJ

University of Cincinnati, Cincinnati, OH, USA

OBJECTIVES: Beta-blockers (BB) were the fifth most widely prescribed class of medications in 2004. They are commonly used for patients with high blood pressure, angina, tachyarrhythmia, and congestive heart failure. The objective of this study was to analyze the drug price trends of brand-name and generic beta blockers, and to assess drug utilization and market-share competition in US Medicaid Programs. **METHODS:** The monthly average wholesale price (AWP) per daily dose for each antihypertensive beta-blocker available between 1986 and 2002 was evaluated using data extracted from First DataBank. National Medicaid pharmacy data files were also analyzed to construct the quarterly prescription numbers and per-prescription reimbursement figures for each drug in the time frame of 1990 through 2004. The market-share of beta-blockers was calculated based on numbers of prescriptions. **RESULTS:** Since 1993, the average AWP for brand-name drugs increased over time, while generic drug prices decreased or changed slightly. The only exception was propranolol. Reimbursement cost per prescription showed a similar pattern. The expenditure for BBs in US Medicaid programs in 2003 was \$206 million (114.8 million for brand-name drugs, 91.6 million for generics). While the market share of brand-name BB prescriptions dropped from 63.1% in 1991 to 25.5% in 2003, Toprol prescriptions has increased sharply to 870,037 in 2nd quarter 2004 since entry to the market in early 1992. The prescriptions for Tenormin and Lopressor decreased over time due to availability of generic products. The prescriptions of atenolol and metoprolol increased sharply after they were introduced into the market. **CONCLUSIONS:** Large increases in BB expenditures paralleled the increased number of prescriptions. The increased use of BB might be due to the blood pressure benefit for diabetic patients and mortality benefit for post-MI patients with heart failure. The market share competition between brand-name and generic drugs was observed in U.S. Medicaid programs.

PCV32

DRUG PRICE AND UTILIZATION OF ACE INHIBITORS IN US MEDICAID POPULATION

Li X, Jing Y, Guo JJ, Wigle PR, Chen Y, Kelton CM

University of Cincinnati, Cincinnati, OH, USA

OBJECTIVES: Angiotensin-converting-enzyme inhibitors (ACEIs) are used by millions of Americans to treat high blood pressure, heart failure, and kidney disease. The objective of this study was to analyze the drug price trends of ACEIs, and to assess drug utilization and market-share competition in US Medicaid Programs. **METHODS:** The monthly average wholesale price (AWP) per daily antihypertensive dose for each ACEI was evaluated using data extracted from the First DataBank. Data for ACEIs available between 1989 and 2002 were assessed. National Medicaid pharmacy data files were also analyzed to construct the quarterly prescription numbers and per-prescription reimbursement figures for each drug from 1991 through 2004. The market-share of ACEIs was calculated based on proportion of numbers of prescriptions. **RESULTS:** The average AWP per daily antihypertensive dose for brand-name drugs increased over time, while the AWP for generically available ACEIs decreased dramatically after being introduced into the market. The AWP per daily dose for Prinivil, Vasotec, Zestril were approximately \$2 to \$2.50 and relatively higher than other ACEIs. The average reimbursement per prescription for brand-

name ACEIs in Medicaid increased from \$33.30 in 1991 to \$49.30 in 2004. The average reimbursement per ACEI generic prescription in Medicaid decreased from \$34.00 in 1996 to \$24.60 in 2004. The market share of brand-name ACEI prescriptions dropped from 100% in 1991 to 20% in 2004. After generic ACEIs became available, brand-name prescriptions decreased dramatically. The generic market share took over the brand-name market share in 2003 due to the increasing use of lisinopril and enalapril. **CONCLUSIONS:** Generically available ACEI AWP and reimbursement prices decreased due to competition, but there was little impact on brand-name reimbursement prices. The market share competition between brand-name and generic drugs was observed in Medicaid programs. Decreased use of brand-name ACEIs might be due to Medicaid policy of generic substitution when available.

PCV33

PRESCRIPTION DRUG INSURANCE STATUS AND UTILIZATION OF ANTI-HYPERLIPIDEMICS: RESULTS FROM THE 2000 MEDICAL EXPENDITURE PANEL SURVEY

Gupta K, Cline R

University of Minnesota, Minneapolis, MN, USA

OBJECTIVES: Health insurance instability is a prevalent phenomenon in the United States. A large number of studies provide evidence that health insurance instability affects healthcare utilization. However, none of the studies have looked at the specific effect of prescription drug insurance instability on the use of drugs for chronic conditions like hyperlipidemia. Therefore, the objective of this study was to describe the association between prescription drug insurance instability and the access of anti-hyperlipidemics among people aged 18 to 64 years. **METHODS:** The data for this study was obtained from the 2000 Medical Expenditure Panel Survey, a nationally representative survey of healthcare use and spending in the U.S. civilian, non-institutionalized population. Complete prescription drug coverage data was obtained by combining data from the private prescription drug insurance variable and several health insurance variables representing programs that frequently, or nearly always, include prescription coverage. Medical Conditions (MEPS:HC-052) and Prescribed Medicines (MEPS:HC-015A) files were used to generate information about this disease condition and events of anti-hyperlipidemic access respectively. **RESULTS:** The 2000 MEPS contained 14,223 respondents between the ages 18–64 with sufficient insurance information throughout the year. Among this age group, 740 people reported to have hyperlipidemia whereas only 230 (31.1%) reported purchasing any anti-hyperlipidemics. Among the people who had purchased any anti-hyperlipidemics during the year 2000, 183 (79.57%), 35 (15.22%) and 12 (5.22%) had continuous drug insurance, unstable insurance and no drug insurance throughout the year respectively. The association between drug insurance statuses and acquisition of any lipid lowering agent was statistically significant at $p < 0.05$ after controlling for demographics, socio-economic and employment characteristics. **CONCLUSION:** As in previous studies of insurance instability, there appears to be an association between anti-hyperlipidemic access and prescription insurance status of an individual. Similar studies are required for other chronic conditions like hypertension and diabetes.